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JUNE, 1951

ECONOMICS AND BUSINESS BULLETIN

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SCHOOL OF BUSINESS AND PUBLIC ADMINISTRATION

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The reader's appraisal of the **Bulletin** and comments upon it are solicited. The Committee also will appreciate receiving and will consider requests or suggestions for particular studies which may be of value.

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Agricultural Price Control and Inflation

by NATHANIEL JACKENDOFF*

The inflationary pressures which have been imposed upon our economy by the present international situation have resulted in the adoption of measures for combatting the rising price trend. In addition to the more basic monetary and fiscal measures which have been adopted, the Defense Production Act of 1950 has authorized a number of more direct controls, including those over prices and wages. The provisions relating to agricultural prices contain the most serious flaws in the legislative program, and may result in a breakdown of the price control effort should the potential inflationary pressures develop. The reason for this lies primarily in the application of "parity" pricing as the basic legislative criterion for determining minimum price ceilings. "Parity" is a concept originally developed for the purpose of providing floors for agricultural prices during periods of depressed economic conditions, not as minimum ceiling devises for price determination during periods of inflation. The use of parity pricing formulas in this manner may well defeat the purposes of price control.

THE entry of the United States into open conflict in Korea in June, 1951, and the development of the Korean battle into something more than a mere incident has propelled the United States and its allies into a program of military expansion unexcelled in scope in their history. The imposition of a long-range program of defense expenditures on top of an essentially full-employment economy can only mean inflationary pressures for the duration of the defense effort unless countered by effective monetary and fiscal as well as direct control measures. The more adequate the monetary and fiscal approach, the less the need will be for the exercise of direct controls, and the more successful will be such direct control measures as are adopted. It is the purpose of this paper to discuss what is probably the most critical area in the present program of direct controls as adopted in the Defense Act of 1950, that of agricultural prices.

THE DEFENSE PRODUCTION ACT OF 1950

This act, passed on September 8, 1950, provides among other things for direct control over prices and wages. Apart from the specific exemptions from the provisions of the act as contained in Sec. 402 (e), it is clear that effective price control is potentially handicapped by the special limitations imposed upon the control authorities in the area of farm prices. More explicit provision is made for the protection of agriculture's relative position in the economy than for that of any other economic group.

Sec. 402 (d) (3) provides that no ceiling shall be established or maintained for any agricultural commodity below the highest of two prices. It states,

> "(i) The parity price for such commodity, as determined by the Secretary of Agriculture in accordance with the Agricultural Adjustment Act of 1938, as amended, and adjusted by the Secretary of Agriculture for grade, location, and seasonal differentials, or (ii) the highest price received by producers during the period from May 24, 1950, to June 24, 1950, inclusive, as determined by the Secretary of Agriculture and adjusted by the Secretary of Agriculture for grade, location, and seasonal differentials . . . "

Furthermore, it is provided that no price ceilings may be imposed on commodities, including livestock, which are processed or manufactured in whole or in substantial part from any agricultural commodity, below a price reflecting to the farmer a price equal to the highest price above specified. This provision is reinforced by requiring that processors be allowed a "generally fair and equitable" margin.

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As a further assurance to farmers that they would not be adversely affected by ceiling prices, when imposed, the President is instructed to adjust such ceilings "to make appropriate allowances for substantial reduction in merchantable crop yields, unusual increases in costs of production, and other factors which result from hazards occurring in connection with the production and marketing of such agricultural commodity . . . " Special provisions are also made for certain tobaccos and for items coming under the Agricultural Marketing Agreement Act of 1937, as amended, primarily milk and fruits and vegetables.

Price Control Legislation Pertaining to Agriculture in World War II

The present price control legislation is largely patterned after that of World War II, when similar reference points and adjustments for minimum price ceilings on agricultural products were used. In the first such act following our entrance into the war, the Emergency Price Control Act of January 30, 1942, Sec. 3 (a) provided that minimum price ceilings on agricultural commodities could not be below the highest of: (1) 110 percent of parity, adjusted for grade, location, and seasonal differentials: (2) the market price on October 1, 1941: (3) the market price on December 15, 1941: or (4) the average price during the period July 1, 1919 to June 30, 1929.

The obvious ineffectiveness of price control under the above provisions led to a bitterly resisted amendment in the Stabilization Act of October 2, 1942, which reduced the 110 percent provision to 100 percent of parity, but changed the other bases to the single alternative of the highest price between January 1, 1942 and September 15, 1942, thus permitting those commodities which had meanwhile come to exceed parity to retain their advantage. The President was also given power to adjust ceilings upward where it was necessary either to provide incentives to increase production for war purposes, or to make allowances for increased labor or other costs to farmers which had been incurred since January 1, 1942.

The Parity Concept Developed for Price Support Programs

The key term in the agricultural provisions of price control legislation is "parity". This is so used as to signify that when the price of an agricultural commodity is at "parity" or "100 percent of parity", the terms upon which it is sold in the market, as compared to the prices paid by farmers for the goods which they use, are equal to the average terms upon which comparable exchanges were made during the years immediately preceding World War I. The basic inadequacies of the parity formula lie in its use as a basis for price control primarily because it has a built-in inflationary bias. This may best be explained by reviewing the original purposes of the parity formula, and then analyzing the formula itself.

Parity was first conceived and developed in the United States following the precipitous collapse of farm values in 1920-21. A number of individuals, at about this time, began to analyze the relationship between agricultural and other prices as a basis for legislation to grant equality in exchange to agriculture, using as their reference point the price relationships that had existed prior to World War I. By 1933, statistics on the prices paid by farmers in their local markets for cost of living and production items, and on prices received by farmers for their products were sufficiently developed by the United States Department of Agriculture to make possible the use of these relationships in administering the first Agricultural Adjustment Act.[1]

The A.A.A. of 1933 provides the first legal definition of parity by declaring it to be the policy of Congress, among other things, to:

> ". . . reestablish prices to farmers at a level that will give agricultural

[1]Black, John D., **Parity, Parity, Parity,** Harvard Committee on Research in the Social Sciences, Cambridge, 1942, Chapter V, Reprinted in American Farm Economic Association, **Readings on Agricultural Policy,** Blakiston Company, Philadelphia, 1949, Chapter 7.

TABLE I

Ratio of Index Numbers of Prices Received to Prices Paid by Farmers, 1913-1950

1913	100	1922	80	1931	64	1940	80
1914	99	1923	86	1932	55	1941	94
1915	93	1924	86	1933	60	1942	106
1916	94	1925	92	1934	70	1943	119
1917	118	1926	87	1935	84	1944	116
1918	118	1927	86	1936	90	1945	117
1919	109	1928	90	1937	92	1946	121
1920	104	1929	89	1938	77	1947	120
1921	75	1930	80	1939	77	1948	116

Source: United States Department of Agriculture, **Agricultural Statistics, 1949,** Government Printing Office, 1949, p. 621.

commodities a purchasing power with respect to articles that farmers buy, equivalent to the purchasing power of agricultural commodities in the base period. The base period in the case of all agricultural commodities except tobacco shall be the prewar period, August, 1909, to July, 1914. In the case of tobacco, the base period shall be the postwar period, August, 1919, to July, 1929."[2]

The ratio of prices received to prices paid is the general measure of parity. Using this measure, the reason for the "do something for the Farmers" movement after World War I becomes quite apparent from an examination of Table I. After 1920, the ratio remained adverse to agriculture until the inflationary pressures of World War II brought the parity figure to a level above 100 in 1942.

In the downward swing of the business cycle the prices of agricultural commodities fall farther and faster than the prices of manufactured commodities because of the highly competitive nature of farming, as contrasted with manufacturing, and because of the extremely large proportion of fixed costs of production. These factors combine to make agricultural output highly inelastic relative to price and to result in extreme price fluctuations. The contrast to industrial production and prices is illustrated in Table II by a comparison between the two areas for the years 1928 to 1934.

The original use of price parity as conceived in the Agricultural Adjustment Act of 1933 and its successors was then for the purpose of providing floors for agricultural prices. Price supports were achieved through a variety of techniques such as non-recourse loans by the Commodity Credit Corporation, production and marketing quotas, as well as through price-fixing agreements. The farmer's income position was further protected by direct government payments.

Methods of Determining Effective Parity Prices

The method of determining parity for an individual commodity is today in a state of transition governed by the Agricultural Acts of 1948 and 1949. Prior to January 1, 1950 the sole method in use was to multiply the average price of the commodity in its base period, which was most commonly August, 1909 to July, 1913, by the current index of prices paid by farmers, and divide the product by 100. Thus, if the base period prices of commodities A, B, and C were respectively $0.75, $1.00 and $1.20, and the current monthly index of prices paid by farmers was 200, their parity prices would be respectively $1.50, $2.00, and $2.40. This procedure is most seriously objectionable because it carries forward to the present a set of outmoded price relationships within the framework of agricultural prices. Thus, in the case of most of the so-called "basic" commodities such as corn, wheat, and rice, the most favorable relative price was reached during the pre-World War I period, and this resulted in high parity prices. In the case, however,

[2]Quoted in Shepherd, Geoffrey S., **Agricultural Price Analysis,** Iowa State College Press, Ames, Iowa, Third Edition, 1950, p. 236.

TABLE II

Indexes of Agricultural and Industrial Production and Prices, 1928-1934 (1935-39 = 100)

Year	AGRICULTURAL		INDUSTRIAL	
	Production	Prices Received By Farmers	Production	Wholesale Prices Of Manufactured Products
1928	102	139	99	116
1929	99	138	110	114
1930	98	117	91	106
1931	102	81	75	93
1932	96	61	58	85
1933	96	65	69	85
1934	93	84	75	94

Source: United States Department of Agriculture, **Agricultural Outlook Charts,** 1951, Washington, D. C., p. 2.

of livestock and dairy products, whose relative price positions have been greatly enhanced in recent years, primarily because of changes in consumer diets, this procedure would carry forward relatively low parities.

The disadvantage under which many commodities operated was compromised by permitting them to use other base periods in which their prices were relatively higher, thus according them a higher parity price.[3] In the case of wholesale milk, for instance, in those markets where Federal Milk Marketing orders or agreements are in effect, the base period August 1919-July 1929 or a part thereof may be used.

In order to adjust support prices of agricultural products to a more realistic relative basis in terms of changed supply and demand relationships in recent years, measures were taken in the Agricultural Acts of 1948 and 1949 to adjust the 1909-1913 prices received in such a way as to reflect more recent relationships. The parity price of a commodity will hereafter be determined, except where transitional arrangements prevail, by taking the average of actual prices of the commodity during the last ten calendar years and dividing the result by the average index of prices received by farmers during the same period to give an adjusted base price. The adjusted base price is then multiplied as heretofore by the current monthly index of prices paid by farmers to give the current parity price of the commodity.

Notwithstanding this revision, until December 31, 1954 the parity price of the basic agricultural commodities (cotton, wheat, rice, corn, peanuts and tobacco) will be computed by the old formula if that yields a higher parity. Accordingly, in January, 1951, the month in which the first General Ceiling Price Regulation was issued by the Economic Stabilization Agency, the parity prices of cotton, wheat, corn and peanuts were determined by the unrevised formula.

In the case of non-basic commodities, a transitional parity price will prevail until such year as it may be lower than the parity price computed by the revised formula. The transitional parity is computed by the old formula, the price so derived being reduced by five percent for each full calendar year which, as of the current date, has elapsed since January 1, 1949. In the case of eggs, for example, the new formula yields a parity price of 47.9 cents per dozen, as of January, 1951. On the other hand, the full parity under

[3]This point is made very strongly by John D. Black, **op. cit.,** Chapter 10; "Battling over a choice of base years may thus become merely a struggle for commodity group advantage—just as the old battles over tariff duties used to be. The usual outcome of such battles were a series of log-rolling deals in which each group agreed to help the other get all that it wanted, and the national interest was largely ignored." (p. 22)

the old formula comes to 57.2 cents per dozen. Thus, when that figure is reduced by ten percent for the transitional parity price, the resulting parity price of 51.5 cents per dozen is obtained. Since the transitional parity is higher than the "new" parity, it becomes the effective parity price for eggs. Transitional parity prices were in effect, in January 1951, for almost one-fourth of all the listed non-basic commodities.[4]

Immediate Limitations Upon Price Control of Agricultural Commodities

The revised formula represents a tremendous improvement over the previous one in terms of a realistic basis for determining support prices for agricultural commodities. In view of the conditions at the time the revisions were incorporated, it may be conceded that the transitional arrangements were perhaps desirable in order to prevent too rapid a decline in the support prices for commodities unfavorably affected by the change. It appears unfortunate, however, that the transitional arrangements should have been carried forward into the price control legislation when the problem was no longer one of gradually lowering the floors on certain commodities, while others were raised, but rather to impose effective price ceilings at the lowest possible level.

As it is, among the items on which the effective parity is being estimated under unrevised or transitional arrangements, the Group A commodities listed in Table III were beyond the authority of the price control agency in January, 1951 when the first general ceiling price regulation was issued because they were below parity. Estimated by the revised procedure, as listed in Group B of Table III, eight other commodities were below parity in January, 1951. Approximately two-thirds of the listed agricultural commodities were thus beyond the range of price control.

Apart from benefiting from that parity formula yielding the highest effective parity, agricultural producers are accorded as a legal minimum at least the highest price received during the period May 24, 1950 to June 24, 1950, adjusted for grade, location and seasonal differentials, when such price exceeds the effective parity. Therefore, such an important commodity as soybeans, though its effective parity price on January 15, 1951 was $2.72 per bushel, had an actual average price on that date of $2.90 (107 percent of parity), and a legal minimum price of $3.06 (112.5 percent of parity), thus remaining beyond the pale of control.

In addition to receiving the aforementioned advantage, such agricultural commodities as came within the scope of price control by exceeding the legal minimum price, were included in the general price freeze at the highest levels charged in the period December 19, 1950-January 25, 1951 under the first General Ceiling Price Regulation on January 26, 1951. In this period, (Jan. 15, 1951), cotton stood at 125 percent, rice at 104 percent, beef cattle at 141 percent, and veal calves at 143 percent of parity.

Parity Provides a Flexible Ceiling for Agricultural Prices

The present lack of control over most agricultural prices is compounded by the unlikelihood of the present parity prices of individual commodities remaining stationary should anticipated inflationary pressures be realized in the months to come. First of all, solely within the framework of parity computation there exists a built-in inflationary mechanism, which may or may not be of considerable practical significance. Secondly, through the effects of agricultural price increases on the rest of the economy there may be the basis for a rapidly upward spiralling price structure. Under inflationary pressures, the outcome of existing methods of determining price ceilings for agricul-

[4]Complete data on prices received by farmers including the base data, effective parity prices, adjusted prices, legal minimum prices, and average prices are presented in the mimeographed monthly bulletin of the United States Department of Agriculture, **Agricultural Prices.** The above descriptions of present methods for determining effective parity prices have relied primarily upon the summary in the **Supplement** for January, 1951, pp. 31-38.

TABLE III

Commodities Priced Below Effective Parity on January 15, 1951

Commodity	Average Price on Jan. 15, 1951 as a Percentage of Effective Parity	Commodity	Average Price on Jan. 15, 1951 as a Percentage of Effective Parity
Group A. Based on Unrevised or Transitional Formula Parities:			
Wheat	89	Rye	77 (Dec. 15, 1950)
Corn	90	Sorghum Grain	72
Peanuts	85	Grapefruit	42
Potatoes	56	Lemons	75
Barley	86	Oranges	35
Oats	92	Eggs	82
Group B. Based on Revised Formula Parities:			
Butterfat	91	Apples	78
Wholesale Milk	95	Live Chickens	80
Dry Edible Beans	86	Hogs	97
Sweet Potatoes	79	Live Turkeys	90 (Dec. 15, 1950)

Source: United States Department of Agriculture, **Agricultural Prices,** Jan. 30, 1951, p. 5. This table includes, except where otherwise noted, only those commodities of which 5 percent or more of the annual sales by farmers are normally made in January.

tural products might be the complete collapse of price control.

Because the parity price of a commodity is determined by multiplying the actual or adjusted base period price by the index of prices paid by farmers for the goods they buy, the nature of this index takes on critical significance in this analysis. Obviously any technique of computation of the index which tends to increase it automatically raises parity. This point is rather neatly illustrated by the legislative history of price control during World War II. Over the opposition of the administration, the Emergency Price Control Act of January 1942 contained provision for 110 percent of parity as one of the criteria for determining minimum price ceilings on agricultural products. The utter failure to restrain prices and wages during the following months brought a threat by President Roosevelt to act under the authority of the Second War Powers Act unless Congress took the first steps to revise the price control act. In the subsequent hearings the farm bloc attempted to revise the index of prices paid by farmers to include cash and imputed wages to both hired and family farm labor. During the thirties when such a change had been contemplated the farm bloc vigorously opposed it because the effect would have been to lower the index and so the level of parity supports. This time however though conceding that the 110 percent provision be lowered to 100 percent the effect of the contemplated change in the prices paid index would have been to raise parity to 112 percent as computed by the existing formula. This amendment was defeated, but in the Stabilization Act of October, 1942, the President was instructed to give consideration to increased labor costs in determining price ceilings on agricultural products[5]. The agricultural Act of 1948 did, however, include cash wage rates to farm labor.

The present revised index of prices paid by farmers is composed and weighted as shown in Table IV, the 1924-1929 base to be used for computing data prior to 1935, and the 1937-1941 base to be used for data from 1935 to the present.

[5]The legislative history of agricultural price control standards is discussed in some detail in Sol Segal, "Basic Legislative Standards for Agricultural Commodities", in OPA, **Problems in Price Control: Pricing Standards,** Office of Temporary Controls, General Publication No. 7, United States Government Printing Office, 1947.

TABLE IV

Composition and Percentage Weights in Latest Revised Index of Prices Paid By Farmers

	1924-29	1937-41
Living Cost Items:	41.2%	44.0%
Food (including tobacco)	14.8	16.7
Clothing	12.5	18.6
Autos and Auto Supplies	4.5	6.9
Household Operations	3.9	5.9
Household Furnishings	2.4	4.0
Building Materials	3.1	1.9
Production Items:	36.4	41.2
Feed	10.1	10.2
Livestock	4.4	5.3
Motor Supplies	3.9	5.2
Motor Vehicles	3.9	5.2
Farm Machinery	3.4	4.5
Building and Fencing Materials	3.7	2.7
Fertilizer and Lime	2.7	3.1
Equipment and Supplies	3.3	3.3
Seeds	1.0	1.7
Taxes per Acre on Farm Real Estate:	5.7	3.8
Interest per Acre on Mortgage Indebtedness on Farm Real Estate:	6.5	3.0
Cash Wage Rates:	10.2	8.0
TOTAL	100.0%	100.0%

Source: Shepherd, G. S., **Agricultural Price Analysis**, 1950, p. 245.

It is of particular interest to note the considerable weight allotted to agricultural commodities in this index of prices paid by farmers. Simply adding the 1937-1941 weights for those items with obviously large agricultural components (food, clothing, feed, livestock and seeds) results in a total of 52.5 percent of the entire index. The farmer's share of this total is, of course, considerably smaller. A study by the Department of Agriculture indicates that during recent years the farm value of the consumer's food dollar has approximated fifty cents, while that of various cotton and wool articles, and shoes has averaged around 15 cents.[6] Making allowance for the fact that certain food items such as bananas, coffee and tea as well as a susbtantial portion of the clothing item are imported, but also considering that some portion of the weighting in the other living cost items ought to be included, such as soaps, starch, upholstery, mattresses, blankets, sheets and toweling, a conservative estimate of the weight of actual agricultural products among living cost items would be about eight of the 44 percent. Among the production items, the farm values of feed, livestock and seed are likely to be at least fifty percent of the total weight suggesting an additional allocation to agriculture of about eight or nine percent, to give a total weight of between 15 and 20 percent to agricultural products included in the index of prices paid by farmers.

If we assume a weight of 15 percent for agricultural products, then a ten percent increase in the price, other things being equal, would bring a 1.5 percent increase in the total index, in turn permitting a 1.5 percent increase in the parity price of all farm products, and so raising legal minimum price ceilings on such commodities. Under inflationary pressures, these increases would in large measure be reflected back on the index of prices paid by farmers, though within

[6]United States Department of Agriculture, **Marketing Margins and Costs for Farm Products**, Washington, D. C., June 15, 1948, pp. 5-10. Annual series on food are also published currently in the **Agricultural Outlook Charts**; see the 1951 issue, p. 36.

TABLE V

Index Numbers of Prices Paid by Farmers, 1941 and 1945
(Calendar Years 1910-1914 = 100)

	1941	1945	Percentage Increase
Farm Group:			
Feed	109	176	60
Seed	124	281	117
Food	121	168	31
Clothing	139	220	60
Non-Farm Group:			
Farm Machinery	156	176	13
Fertilizer	100	121	21
Building Materials for Other Than House	162	209	29
Equipment and Supplies	115	142	23
Operating Expenses	109	129	17
Furniture and Furnishings	146	219	50
Building Materials for House	172	221	26
All Commodities bought for Use in Production and Family Maintenance	131	185	41
All Commodities Bought, Including Interest and Taxes	132	172	30

Source: Computed from United States Department of Agriculture, **Agricultural Statistics**, 1949, p. 622.

Note: This index does not include livestock, autos and auto supplies, and cash wage rates as does the latest revised index.

this restricted framework the upward price spiral would shortly become insignificant, as the total index would be increased by a maximum of only 0.225 percent on the second round.

A much more significant type of upward price spiral is evidently possible through the effect of increased costs of farm products on the cost of living of labor. To the extent that the increased cost of farm products could not be absorbed in the subsequent stages of processing and distribution and the profit margins of processors and distributors are maintained, pressures on all living costs would bring wage demands, even in situations where labor has accepted the principle of wage stabilization. In his message to Congress on September 17, 1942, demanding amendment of the first price control act, President Roosevelt vehemently gave expression to this relationship, as follows,

> "It is impossible for the cost of living to be stabilized while farm prices continue to rise. You cannot expect the laborer to maintain a fixed wage level if everything he wears and eats begins to go up drastically in price. On the other hand, it is impossible to keep our prices stable—farm prices or other prices—if wage rates, one of the most important elements in the costs of production, continue to increase."[7]

The combined effect of these increased prices is to raise all the living costs and production costs of farmers, simultaneously raising the parity prices of farm products beyond existing control levels. The increase in prices of commodities purchased by farmers during the period 1941-1945, thus including both the first year before and the last year of effective price control during World War II, reveals these pressures, especially in the farm group. (See Table V.)

The first ceiling price regulation issued by the Economic Stabilization Agency on January 26, 1951, indicated that an attempt would be made to prevent pyramiding of price increases in uncontrolled agricultural commodities by limiting processors and distributors of such commodities to exact dollars and cents adjust-

[7]Quoted in Segal, **op. cit.**, p. 151.

ments in their margins, rather than permitting them to maintain the same percentage margins obtained at the time of the price freeze. It was further indicated in the Statement of Considerations that, "There may be areas where margins of distributors of agricultural commodities, and of processors and distributors of their products, are ample to permit a requirement of absorption of the basic cost increases. Such requirements will be imposed where the situation warrants."

Apart from the more fundamental legal restrictions upon price control of agricultural commodities, the price control authorities recognize certain administrative difficulties. Thus, fresh fruits and vegetables, even if legally subject to price control, because of unusual marketing factors and seasonal and perishable characteristics, are subject to sharp and unforeseeable price fluctuations, making impractical the imposition of a general freeze on these commodities. And, from another point of view, it may be considered undesirable to impose ceilings on certain commodities in short supply despite the fact that their prices exceed the legal minimum. This was declared to be the case, for instance, with American-Egyptian cotton. These administrative difficulties and policy problems, so frequently peculiar to control of agricultural commodities, create additional practical complications.

CONCLUSIONS

It is not intended to place the burden of inflationary developments solely upon the shoulders of agriculture. One of the basic problems of a defense economy is to carry out such monetary and fiscal policies as to prevent a rapid expansion of civilian purchasing power and to transfer as much as possible of existing purchasing power into the hands of the government for the purpose of executing its defense program. The hesitancy of most governments, however, to pursue effective monetary and fiscal policies places much of the burden of controlling inflationary trends upon the more direct techniques of price control.

A basic loophole in any price control program lies in the lack of authority over foreign prices which are reflected domestically through imports. Also, to the extent that increased production and employment result in larger incomes, even without increased wage rates, pressure upon the domestic price level is bound to develop. But it is improbable that wage rates can be stabilized so long as major cost of living commodity prices are permitted to rise. In the limitations upon the authorities to place ceilings upon farm prices lies the greatest basic flaw in the Defense Production Act of 1950.

When the Economic Stabilization Agency embarked upon its first large-scale venture into control with the general freeze on January 26, 1951, it was legally helpless to impose controls upon most agricultural commodities other than certain livestock, wool, cotton and cottonseed, tobacco, rice and prunes. This was primarily due to the application, in an inflationary context, of a combination of parity formulas intended for a program of price supports. Furthermore, the very nature of the parity formulas is such that, once inflationary pressures are evinced, the flexible ceilings on agricultural commodities rise further, not only because of price increases in the non-agricultural sector of the economy which may have originated largely in the rise of uncontrolled farm prices, but also because of the increase in the prices of those farm products or their derivatives which are bought by the farmers themselves.

Under the present law the price control authorities can only be expected to limit any speculative upward movement of prices within the scope of their authority. But until something is done to extend their authority over presently uncontrolled farm prices, even to the extent of forcing rollbacks, the price control agency is likely to lose the respect and support of those groups which suffer most in inflation—all fixed income groups and labor.

Philadelphia: A Two-Party City

by WILLIAM J. McKENNA*

A significant realignment of political parties has occurred in Philadelphia since 1932. The long unchallenged dominance of the Republican party is threatened by the rising force of the Democratic party and Philadelphia seems definitely to be a two-party city. Philadelphia has voted Democratic in three of the four United States senatorial elections since 1940, four out of five of the last presidential elections, seven out of the last eight congressional elections and, since 1933, the Democratic party has elected the City Controller four out of five times, City Treasurer and Register of Wills three out of five times and City Coroner two out of five times. Only in the mayoralty and councilmanic elections has the Republican party won consistently since 1932, and in these by a very much closer vote than prior to 1932. In the 1951 mayoralty elections the Republican party faces its greatest challenge since the Democratic victory in 1881 and the Fusionists' victory of 1911.

FOR many years Philadelphia has been described as one of the bulwarks of the Republican party in local, state and national elections. Prior to 1932 Philadelphia had clung with unfailing regularity to the Republican banner in all elections —national, state, and local—for over sixty years. Moreover, during the first three decades of the twentieth century the Democratic party afforded so little opposition to the Republican party that it was difficult to attract a strong candidate to head the mayoralty ticket or to run for the row offices of City Controller or City Treasurer. Election campaigns during this thirty-year period were matter-of-fact affairs and completely devoid of uncertainty of outcome. This paper will examine the changing political pattern of Philadelphia in recent years in order to find whether the one-party character of the city has definitely changed since the national victory of the Democratic party in 1932.

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ELECTIONS OF U. S. SENATORS

In 1914 the first election of a United States Senator by the direct vote of the people was held, as a result of the adoption of the Seventeenth Amendment to the U. S. Constitution. In that year as well as in all but two senatorial election years through 1946, Philadelphia voted Republican. The two exceptions occurred in 1940 and 1944 when the Democratic majorities were 165,415 and 140,370 respectively. The increasing strength of the Democrats had been evident in the 1934 election when the Republican candidate for United States Senator won Philadelphia by the slim majority of 3,012 votes out of a total of 665,970 cast. In 1946, however, Philadelphia gave the Republican senatorial candidate, Mr. Edward Martin, a majority of 108,853 votes over the Democratic incumbent, Senator Guffy, following the broad national trend in that year. It is notable that in 1942 Mr. Martin carried Philadelphia by only 157 votes out of 635,767 cast in the gubernatorial campaign of 1942. (See Table I.)

In the senatorial election of 1950, however, Philadelphia's vote was strongly Democratic, a majority of 63,995 out of a total vote of 831,029 being recorded for the Democrats, in the face of a state triumph for the Republican candidate, Governor James Duff. Thus, since 1932, Philadelphia has gone Republican in only 3 of the 6 U. S. Senatorial elections. The three Republican victories were won with majorities much smaller than those characteristic of the elections prior to 1932.

ELECTIONS OF THE GOVERNOR

From 1890 until 1934 only one Democratic Governor had been elected in Pennsylvania and in that election the Repub-

TABLE I

Philadelphia Vote for the Republican and Democratic Candidates for United States Senator in General Elections, 1914-1950

Year	Republican	Democratic	PHILADELPHIA MAJORITY Republican	Democratic
1914	164,519	34,336	130,183	
1916	190,586	80,594	109,992	
1920	292,868	88,169	204,699	
1922	242,859	57,589	185,270	
1926	306,553	70,782	235,771	
1928	412,747	259,819	152,928	
1930	357,283	96,544	260,739	
1932	326,281	249,943	76,338	
1934	334,491	331,479	3,012	
1938	420,025	402,858	17,167	
1940	353,237	518,652		165,415
1944	346,675	487,045		140,370
1946	441,888	333,035	108,853	
1950	383,517	447,512		63,995

Source: The **Pennsylvania State Manual**; pre-1922, **Smull's Legislative Handbook**, current issues. The **Bulletin Almanac and Yearbook**, The Evening Bulletin, Philadelphia, current issues. The Philadelphia Registration Commission, **Annual Reports**, current issues.

licans carried Philadelphia with a vote of 106,014 to 85,126. Forty years had elapsed before the Democratic party had equalled its vote of 1890, and that occurred in 1930, as a result of a factional dispute within the Republican ranks, over Gifford Pinchot's candidacy for Governor. In this election the Democratic candidate received 129,856 votes—21,490 more than Pinchot's total of 108,375. But in this election a large proportion of the regular Republican organization supported the Democratic nominee, John M. Hemphill, on a separate Liberal party ticket. Hemphill received an additional 226,811 votes on the Liberal party ticket. The 1930 vote cannot, however, be interpreted as evidence of Democratic strength. It was nothing more than a revolt against Gifford Pinchot. (See Table II.)

The state victory of Robert E. Pattison on the Democratic ticket for Governor in 1890 was not due to his vote in Philadelphia, for he lost the city by a vote of 106,014 to 85,126. This year marked the high-water mark of the Democratic party in Philadelphia until 1934 when they lost the city by only 19,836 votes. The Democratic party did even better in 1942 when the vote was only 157 votes short of victory. Finally, in 1950, the Democrats tasted victory when they carried Philadelphia by the impressive majority of 77,078. It may well be noted that it was the first time since the Republican party became the dominant political organization in Pennsylvania during the Civil War period, that this had happened. Lincoln's victory in the Presidential election of 1860 had struck the Democrats in Philadelphia with disbelief. They regarded the victory of the "Black Republicans" as catastrophic.

PRESIDENTIAL ELECTIONS

Philadelphia had consistently voted in favor of the Republican nominee for President of the United States from the time the party became a national force in 1860 until 1936. In that year it went Democratic by the margin of about 210,000 out of a total vote of 869,514. Since 1936, however, the city has gone Democratic in the three presidential campaigns. The Democratic margin in 1940 and 1944 was comparable to that of 1936, but in 1948 the city went Democratic by only 6,737. Table III presents a tabulation of the political division of the vote in all presidential elections since 1896.

TABLE II

Philadelphia Vote for the Republican and Democratic Candidates for Governor In Selected Years from 1890 to 1950

Year	Republican Vote	Democratic Vote	VOTE MAJORITY Republican	Democratic
1890	106,014	85,126	20,888	
1922	245,312	65,111	181,202	
1926	312,492	66,942	245,550	
1930	108,379	129,865	*	*
1934	343,979	324,123	19,836	
1938	417,050	404,606	12,444	
1942	317,962	317,805	157	
1946	440,286	334,165	106,121	
1950	374,977	452,055		77,078

Source: **Ibid.**

*In 1930 the regular Republican organization in Philadelphia did not support Gifford Pinchot, the Republican standard-bearer for Governor. Instead it backed a former Democrat under the banner of a newly created "Liberal Party". Hemphill received a "Liberal Party" vote of 226,811 in addition to one Democratic vote. Hemphill did not carry the state.

CONGRESSIONAL ELECTIONS

From 1914 to 1932 inclusive no Democratic congressman was elected from Philadelphia's congressional districts, which numbered seven at that time. This unbroken record of Republican triumphs was shattered decisively in 1934 when Democrats were elected in three of the seven congressional districts. In 1936 all seven of the Democratic congressional candidates were swept into office. That and the election of 1944 mark the zenith of Democratic fortunes with reference to the congressional representative from Philadelphia. But in no year since 1936 —with the exception of 1946—have the Republicans gained a majority of the congressional representation from Philadelphia. It may also be noted that in 1950 the two seats that the Republicans did win were very close. In the 3rd Congressional district the Republican majority was only 931 out of a total vote of 125,503, and in the 6th congressional

TABLE III

Division of the Philadelphia Vote for the Republican and Democratic Presidential Candidate from 1896-1948 Inclusive

Year	Republican	Democratic	MAJORITY Republican	Democratic
1896	176,462	63,323	113,139	
1900	173,657	58,179	115,478	
1904	227,709	46,875	180,834	
1912	91,994	66,308	*	*
1916	194,163	90,800	103,363	
1920	307,826	90,151	217,675	
1924	347,457	54,213	193,244	
1928	420,320	276,573	143,747	
1932	331,042	260,276	70,766	
1936	329,881	539,757		209,876
1940	354,878	532,149		177,271
1944	346,380	496,367		149,987
1948	425,962	432,699		6,737

Source: **Ibid.**

*Theodore Roosevelt secured 68,528 "Washington Party" and 6,908 "Bull Moose Party" votes in Philadelphia. Taft secured the regular Republican vote.

TABLE IV

Congressional Seats Won by the Republican and Democratic Candidates in Congressional Elections from 1914 to 1950

Year	Total Districts	Republican Seats	Democratic Seats
1914	7	7	0
1916	7	7	0
1918	7	7	0
1920	7	7	0
1922	7	7	0
1924	7	7	0
1926	7	7	0
1928	7	7	0
1930	7	7	0
1932	7	7	0
1934	7	4	3
1936	7	0	7
1938	7	2	5
1940	7	1	6
1942	7	3	4
1944	6	0	6
1946	6	6	0
1948	6	2	4
1950	6	2	4

Source: **Ibid.**

district the Republican majority was 413 votes out of a total of 148,229. The record of the division of congressional seats in Philadelphia from 1914-1950 inclusively is found in Table IV.

TWO-PARTY CHARACTER OF PHILADELPHIA IN NON-MAYORALTY ELECTIONS

An examination of the record of Philadelphia in non-mayoralty elections since the national triumph of the Democratic party in 1932 warrants the conclusion that Philadelphia is no longer a one-party city. A summary of the voting record in non-mayoralty elections in Table V makes this quite evident.

Mayoralty Elections

The mayors of Philadelphia have been elected by the people at large since 1841.[1] Since 1868 only two Democratic mayors have been elected in Philadelphia. In 1868 Daniel M. Fox defeated the Republican candidate, Hector Tyndale by a majority of 2,143. The 1868 victory of Fox had been preceded by the unexpected victory of Peter Lyle, the Democratic candidate for Sheriff. This victory was a very gratifying one for the Democrats. The Sheriff occupied what was in those days a very powerful office and he was instrumental in aiding a Democratic victory in the mayoralty election in 1868.

The conduct of this mayoralty campaign was a rough-and-tumble affair, typical of the elections of that period. The secret Australian ballot was not in use in those days, and the various colored ballots enabled the faithful poll-workers to keep a fairly close count on the way the wind was blowing. As one writer later described it, the election was the scene of a fierce struggle during which the vote was influenced by

> "colonized vagabonds, false personators, and ruffians from New York, Baltimore and Washington",[2]

who were imported to swell the majorities. Sheriff Lyle, in keeping with the tactics of the day, swore in a "large posse

[1]The people were given the right to elect the mayor in 1839. In 1839 no candidate received a majority of the votes cast, and the council exercised its right, under such circumstances, to choose a mayor.

[2]Ellis Paxson Oberholtzer, Philadelphia, **A History of the City and its People,** Vol. 2, p. 399 (1908).

TABLE V

Frequency of Republican and Democratic Victories in the Principal Non-Mayoralty Elections from 1932-1950

Office	Times won by Republican Party	Times won by Democratic Party
United States Senator	4	3
Governor	4	1
Majority of Congressional Representation	3	7
President	1	4

Source: **Ibid.**

of bartenders . . . and proprietors of rat and dog pits to guard the peace".[3] The methods used by these "guards" were counted upon to influence the conduct of the election along "proper" lines, and to counteract the tactics of the opposing party. The election of 1868 was indeed a lively one. It was marked by the display of blackjacks and revolvers—all very effective weapons in such a campaign. But if we are to take the account of a local newspaper[4] as a description of the election, things were not too rowdy. In fact, the election passed off "quietly", and although "there were a few instances of disorder in some election precincts" there was "no general disorder which prevented the electors from exercising their rights". Evidently the standards upon which we judge elections since that day have changed, or perhaps tactics have become more refined.

The three-year control of the mayoralty by the Democrats was rejected in the election of 1871. In that year William S. Stokely, the Republican candidate, was victorious by over 9,000 votes. In 1874 Stokely was opposed by a highly-respected lawyer, Alexander Kelly McClure. This election was an extremely quiet one, and fascinating from the viewpoint of the means whereby victory was guaranteed. McClure was defeated by 10,985, although the early betting odds were quoted at 100 to 80 in his favor. McClure writing in 1905, however, claimed that his defeat was perpetrated by a fraud. As the story goes, one day near the close of the campaign he was called to a private house of a local politician who warned him to call off all the bets made on his expected victory. The local politician told him that arrangements had been made so that he would be defeated by over 10,000 votes no matter how many were actually cast. McClure never learned the secret upon which this uncanny prediction was made, but he later explained his defeat with the method used in counting the vote. The count was conducted by certain city authorities, thus:

> "The ballot boxes of the city were . . . taken in the custody of the city authorities, and an extra box was sent out to the divisions which could be safely manipulated, containing a given number of tickets for Mayor. Some one, and perhaps more of the election officers understood what the box meant, how many tickets were in it, and it was only necessary to susbtitute that box for the one in which the tickets had been received during the first half of the day, and either add or take from it before substituting the number of tickets

[3] **Ibid**, p. 399.

[4] Philadelphia Inquirer, Philadelphia, Pa., October 14, 1868. In another column of this same issue an article entitled "Scenes in the City", describes the election as being marked by an "active and energetic canvassing almost unknown in any previous contest". In this same article are described the following energetic action at the election: "A Probable Murder", "A Deputy Sheriff Shot", "Cowardly Attack on Policemen — Three Patrolmen Shot and Others Injured", "A Policeman Beaten", "A Bogus Judge", "A Deputy Worsted", "Another Deputy in Trouble", "Outrageous Proceedings", "Two Young Men Shot", "Terrible Double Murder". This is the election which the Inquirer, on its editorial pages says, "passed off quietly".

necessary to make it correspond with the poll list."[5]

Be that as it may, Stokely was again reelected for a third term in 1877.

The third term reign of Stokely had led to such a state of municipal corruption that a committee of one hundred of the most outstanding citizens of Philadelphia was formed to seek improvement in city affairs. This Committee of One Hundred was the forerunner of several other similar local reform committees that have been formed since that day. Yet, according to an historian writing in 1907, this Committee of One Hundred was "the most successful as well as the most famous reform organization in the history of Philadelphia".[6]

The circumstances that led to the formation of the Committee of One Hundred are not unlike those which have existed in recent years in Philadelphia. A great wave of dissatisfaction with the reigning party and local conditions swept the city. The movement had been building up for a number of years. In 1877 it had been preceded by a surprising victory of a young reform lawyer, Robert E. Pattison, in the election for City Controller. Although Pattison's 1877 victory was by a small majority, it was the more astonishing in view of the decisive Republican victory in the gubernatorial election of 1875 when the party's candidate for governor carried the city by over 15,000 and Hayes, the Republican candidate for President, had won the city by approximately 16,000 votes.

Pattison, once in office, conducted such a vigorous campaign of reform that he was reelected Controller by over 13,000 votes and the political success of Pattison spread beyond Philadelphia and won him the Democratic nomination for Governor in 1882. He repeated his success as a vote-getter and was elected Governor by a state majority of 40,202. Although Pattison did not carry Philadelphia in this election he gave a good account of himself. He lost the city by only 3,464 votes out of a total of 138,286.

The Mayoralty Election of 1881. The success of Pattison in reelection to the city Controllership encouraged the Committee of One Hundred to seek the defeat of Stokely in the election of 1881. The Committee was prepared to support a Democratic candidate for Mayor, Samuel G. King, provided he accepted as his running mate the Committee's candidate for Receiver of Taxes, John Hunter, an independent Republican, free of any connection with the local political machine. Hunter was to run on a Democratic-Fusion ticket.

At first Richard Vaux, who had served as the Democratic Mayor from 1856-1858 and was then the titular head of the Democratic party, refused to accept a Fusionist ticket. Vaux was heartily in favor of party regularity and party fealty. At length, however, he was persuaded to accept Hunter as a running mate as a prerequisite for the volunteer support of the Committee of One Hundred.

In the style typical of reform campaigns, the campaign itself was conducted on a very active scale. Political machines are often at the mercy of the unbridled enthusiasm of reform movements. The campaign of 1881 was no exception. Many nominal Republicans sprang to the support of the Committee and worked for the election of the King-Hunter ticket. The result was the victory of the King-Hunter ticket, but King won by only 5,787, while Hunter had a majority of 26,586. Clearly, therefore, the many thousand normally Republican votes cast for this ticket were responsible for the victory of the King-Hunter ticket.

The reign of King and the Democrats was short. He was defeated in a close battle with the Republican candidate, William B. Smith, by a vote of 79,552 to 70,440. The defeat of the "Committee of One Hundred" candidate in 1884 thus marked the end of the electoral influence of that Committee. It had accomplished considerable reforms and left a good record when, in 1886, it was disbanded.

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[5]Alexander K. McClure, Old Time Notes on Pennsylvania, Vol. II, pps. 374-375.

[6]Oberholtzer, **op cit.**, Vol. II, p. 417.

After 1881 the Democratic party gradually was reduced to an ineffectual political force and remained such until after 1932.

Blankenburg 1911 Fusion Victory. In 1911 Rudolph Blankenburg, a "rebellious Republican" and a member of the "Committee of One Hundred", which had backed the Democratic mayoralty ticket in 1881, secured the mayoralty nomination on the Keystone party ticket and also received the support of the Democratic party. He was opposed by George H. Earle, II, a highly respected financier and business man. The campaign was conducted on a rather high level and public interest was very intense. The turnout on election day was the largest ever witnessed in a mayoralty campaign in Philadelphia to that time, with approximately 265,000 voting. Although Blankenburg was elected by the narrow margin of about 4,800, he had received a total vote of approximately 135,100 to Earle's 130,300.

The Philadelphia Inquirer[7] termed the election the "most remarkable . . . that this city has ever witnessed". But the victory of the "old horse of reform" cannot be said to be a Democratic victory in the same sense as the victory of the Democratic-Fusion ticket of 1881. In the 1881 election the Democrats were the dominating element in the fusion, whereas in 1911 they were definitely a secondary element in the Keystone-Democratic fusion. Some indication of this may be found in the breakdown of the votes received by the three major candidates for the office of Controller as follows:

William R. Knight, Republican	131,407
Henry Fisher, Keystone	102,087
J. J. Burke, Democrat	31,516

The Burke vote indicated the measure of Democratic strength. Even if we are to accept the Democratic claim that they gave Blankenburg approximately 40,000 votes[8] the victory cannot be said to be a Democratic one. It was due to the unusually large turnout of the "stay-at-home" vote. The Keystone party had also been a strong vote-getter in the gubernatorial election of 1910 when it polled over 85,000 votes, compared to approximately 130,000 for the Republican candidate, and 16,000 for the Democratic.

The 1911 election success of the Keystone-Democratic ticket has not been repeated since by any third party organization in Philadelphia, although there was a third party challenge in 1927, when J. Hampton Moore ran on the Citizen's party and Labor ticket against Harry A. Mackey. Even in the 1911 campaign the Keystone party did not win any of the "row offices" or council seats.

Mayoralty Elections Since 1932. The resurgence of the Democratic party as a political force in non-municipal elections has already been dealt with in this paper. It remains to trace the character of the Democratic party as a political factor in recent mayoralty elections.

In politics, history has a way of repeating itself. In recent years several local committees, intent upon improving the conditions in Philadelphia, have again been formed. These committees are composed of many who are nominally members of the Republican party. Their motives are unquestionable. They are intent upon self-improvement from within the Party. Their success is evidenced by the conduct of the recent campaign for the election of City Controller J. Sill Clark, and City Treasurer Richardson Dilworth. These local committees have been joined in their efforts by the Evening Bulletin and the Philadelphia Inquirer, both of which backed Clark and Dilworth in the recent elections.

A perusal of Table VI will reveal how great has been the change in Democratic

[7]November 9, 1911.

[8]Philadelphia Inquirer, Nov. 9, 1911. The Democrats argued that Burke's 31,000 votes for Coroner was evidence of their strength, and that other Democrats voted for the Keystone ticket for Controller. The Democrats wanted Blankenburg to give them at least the post of Director of Supplies in his Cabinet.

TABLE VII

Total Vote for the Democratic and Republican Candidates for the Row Offices 1929-1933

	Controller		Treasurer		Register of Wills		Coroner	
Year	Repub.	Dem.	Repub.	Dem.	Repub.	Dem.	Repub.	Dem.
1929	315,593	*	304,605	30,091	298,000	32,813	296,623	30,308
**1933	222,003	300,094	215,074	307,468	222,760	290,173	223,139	255,125
1937	332,305	346,206	332,102	345,714	335,335	343,060	336,848	341,750
1941	311,861	312,822	313,578	309,087	315,262	308,246	315,975	307,354
1945	335,830	264,427	338,011	264,427	339,787	258,109	339,062	257,991
1949	352,866	464,370	352,168	465,490	356,719	460,178	457,932	358,538

Source: **Ibid.**

*WillB. Hadley was both the Republican and Democratic nominee for Controller in 1929.

**The Democratic candidates were also supported by the "Town Meeting" party. The Democratic candidates for Controller (WillB. Hadley) and for City Treasurer (S. Davis Wilson) in addition received the support of the "Prohibition" and "Relief" Parties.

strength in mayoralty elections in this city since 1927. In that year, the Democratic party cast an ineffective total vote of over 10,648,[9] whereas the Republican total was a decisive 296,551. In the 1931 mayoralty election the Democratic ticket did not do much better, though it tripled its total vote, getting 30,821. The total Republican vote, however, rose to 367,344 in that year.

In 1935 the situation was considerably different and the Democrats gave the Republican ticket the closest fight it had had since 1868. It polled 333,825 votes to the Republican total of 379,303. This election represented an increase of the total Republican vote of only 11,959, compared with the Democratic increase of 303,004—a four-year increase of over 1000%. Since 1935 the Democratic party has been a threat in every mayoralty campaign, although it has won no elections.

Row Office Elections

The elections for the row offices (i.e.—Controller, Treasurer, Register of Wills, and Coroner) occur in non-mayoralty election years. These elections, therefore, are not directly influenced by the mayoralty campaigns as are other city offices.[10] Since 1929, as Table VI shows, the Democratic party has been victorious in three of the six row office elections. The sharp increase of the Democratic vote in these row office elections after 1929 is indicative of the two-party character of these elections. The row office elections are often affected by the periodic reform movements that characterize Philadelphia politics.[11] They are also affected more by local political issues than is the case in non-municipal elections.

Council Elections

The election of the twenty-two councilmen occurs at the same time as the mayor. Because of the apportionment system in existence today the Council is always much more heavily Republican than the percentage vote which that party receives in the councilmanic elections. Table VIII shows the Republican-Democratic distribution in the Council in selected years. The overwhelming preponderance of Republicans on the Council, however, is not representative of the

[9]In the 1927 election J. Hampton Moore, an independent Republican, also opposed the regular Republican candidate, Harry A. Mackey. Moore received 117,500 votes on the "Citizens' Ticket", and 16,268 on the "Labor Ticket". This may in part account for the very low Democratic vote.

[10]The Sheriff, District Attorney, Recorder of Deeds, Receiver of Taxes, and Commissioners are elected at the same time as is the Mayor, and a victory for the Mayor is also a victory for them. The only exception to this occurred in the Blankenburg Fusion victory of 1911.

[11]The 1949 victory of J. Sill Clark to the Controllership, and Richardson Dilworth to City Treasurer can be said to have been influenced by the reform movement that swept the city in that year.

TABLE VIII

Council Seats Won by the Republican and Democratic Candidates in Council Elections, 1931-1947

Year	Total Seats	Republican	Democratic
1931	22	22	0
1935	22	22	0
1939	22	21	1
1943	22	20	2
1947	22	22	0

Source: **Ibid.**

voting strength of the two parties in majoralty elections since 1931.[12]

REGISTRATION STRENGTH

The two-party character of Philadelphia politics can be realized by a study of the registration figures (See Table VI) since 1927 in mayoralty campaigns. In 1927 the Republican registration figure stood at 495,152 while that of the Democrats was 26,507. By 1935 the Republican registration came to 603,682 and the Democratic to 299,298. After the enactment of the permanent registration law of 1937 the total registration increased, but that of the Democrats increased while that of the Republicans declined. In 1939, for example, 566,526 Republicans were registered as compared with 426,894 Democrats.

The extent of registration, however, does not mean too much in an actual election. In every mayoralty election since 1931 the Republican party has polled a smaller number of actual votes than there were registered Republicans, The Democrats, on the other hand, have polled, during the same period, a greater percentage of their registered voters than have the Republicans, even exceeding the number of registrants in the elections of 1931, 1935, and 1947. In election years since 1931 the Republican percentage of registrants voting has varied from a high of 71 in 1931 to a low of 58 in 1943. The Democrats, on the other hand, polled an election vote as low as 84% in 1939, but as high as 111% in 1947. These percentages indicate that registration figures alone are a none too certain guide for predicting the nature of the actual vote at mayoralty elections. Yet they indicate that, if the Democratic party has a high registration, then there is a likelihood that they will have a high vote in the ensuing election. That, at least, is the record from 1935 to 1947.

Another comparison may be important. There has been in all mayoralty elections since 1931 a high degree of similarity in the total Republican vote. In these five

[12]Under the new city charter the Council would be composed of 17 councilmen, but 7 of them would be elected at large. This would seem to result in more balanced representation.

TABLE VI

Republican and Democratic Registration and Actual Votes Received in Mayoralty Elections from 1927 to 1947

	PARTY REGISTRATION			Total	PARTY VOTE			
Year	Total Registration	Republican	Democratic	Vote (All Parties)	Republican	% of Reg.	Democratic	% of Reg.
1927	523,584	495,152	26,507	444,215	296,551	*	10,648	*
1931	555,951	517,488	33,886	407,343	367,344	71	30,821	90
1935	808,644	603,682	299,298	724,520	379,303	62	333,825	110
1939	1,018,924	566,556	426,894	752,486	390,356	70	360,680	84
1943	983,621	593,942	367,204	633,459	346,297	58	282,832	94
1947	1,003,464	693,535	289,277	734,560	413,091	60	321,469	111

Source: The Philadelphia Registration Commission, **Annual Report,** current issues.

*The entry of J. Hampton Moore into the campaign as an independent Republican would make the percentage in this case unrepresentative. The percentages in other years are in approximate round numbers.

mayoralty elections the total Republican vote has varied from a high of 413,091 in 1947 to a low of 346,297 in 1943—a variation of no more than 47,677 votes from the high to the low. But the Democratic vote has shown a much greater fluctuation—from a low of 30,821 in 1931 to a high of 350,680 in 1939—a difference from the low to the high of 290,648, with 321,469 in 1947. Perhaps these figures indicate that the Republican organization can count upon a minimum vote base. Yet of the total increase in the vote from 407,343 in 1931 to 734,560 in 1947, the Republicans have gained only 45,647 additional votes out of the total increase of 327,117; whereas the Democrats gained 281,470 over that low of 30,821 in 1931. This figure seems to indicate that in any increase in total vote the Republican party cannot hope to match the Democrats. Similarly, in any decline in the total vote cast, the Republican proposition will rise as was shown in its election of 1943. In the event of a close election this, if repeated, could mean that the Republican party would be in for a real battle. This would be particularly true if there is a repetition of the reform movement that characterized the election for City Controller and City Treasurer in 1949.

CONCLUSION

The record of the Republican and Democratic parties in the presidential, United States senatorial, gubernatorial, and mayoralty elections of 1932-1950 strongly indicate that Philadelphia can no longer be regarded as a one-party city. It is now definitely a two-party city.

Only in the mayoralty and councilmanic elections has Philadelphia in this period clung consistently to the Republican banner. If the signs of the recent past are any indication, the Republican party in the mayoralty election of 1951 will face its severest test since the victory of the Democratic-Fusionist ticket in 1881 and the Blankenburg triumph of 1911 on the Keystone-Democratic ticket.[13]

[13]At the time of this writing (April, 1951) there have been no positive indications as to who will be the Republican candidate for Mayor in November. Mayor Samuel, under the present two-term rule and the rule of the proposed City Charter, is ineligible. Mr. Richardson Dilworth has indicated that he will support Controller Clark as the Democratic candidate for Mayor, and that he will be a candidate for the office of District Attorney.

PHILADELPHIA BUSINESS INDEX

The September 1950 issue of the **Bulletin** presented a new index of general business conditions in the City of Philadelphia. The series, prepared by Robert T. Kline, and designed to reflect economic activity exclusively within the boundary of the city, was based upon a combination of statistical data representing (1) industrial electric power sales; (2) indexes of employment and employee-hours; (3) department store sales; (4) bank debits; and (5) total construction. The following table presents the index for the years 1939 through 1950 and by month from January, 1951.[1]

[14]Robert T. Kline, "A Measurement of General Business Conditions in the City of Philadelphia," **Economics and Business Bulletin,** School of Business and Public Administration, Temple University, Philadelphia, Pa., September, 1950, pp. 33-40.

Index of General Business Conditions, City of Philadelphia
1947 — 100

Year	Index Number
1939	73
1940	77
1941	96
1942	99
1943	106
1944	106
1945	98
1946	100
1947	100
1948	103
1949	97
1950	108
1951 January	117.6
February	113.3 p

p—preliminary

The Evolution of Automatic Merchandising in the United States

by DOROTHY S. WASHBURN*

A study of the evolution of automatic merchandising in the United States, this article concludes that automatic merchandising is a rapidly expanding enterprise both as to applications and in total utilization. The effect of automatic merchandising on retailing is examined and the potentials of distributive cost reduction demonstrated.

AUTOMATIC merchandising is becoming an increasingly common method of retail distribution. It may be defined as any system which places the goods into the hands of the consumer and provides wanted services conveniently and efficiently through the use of automatic vending machines.[1] Modern automatic merchandising machines are classified under the following two categories: (1) merchandise machines for dispensing beverages, candy, cigarettes, chewing gum, nuts and other products which are adaptable to machine distribution; and (2) service machines for rendering personal services, such as parcel lockers, weighing scales, insurance machines, ticket machines, electric razors and the like.[2]

Although the active history of automatic merchandising in the United States covers a period of about 70 years, the industry's greatest expansion commenced in 1945. It is, therefore, the purpose of this study to outline the development of this operation and determine the impact of automatic merchandising on retailing in the United States.

HISTORY AND DEVELOPMENT

The origin of automatic merchandising can be traced back 2,000 years to the time when Hero of Alexandria invented a mechanism for dispensing a measured quantity of holy water. This early mechanical device is considered the prototype of all modern automatic merchandising machines.[3] Apparently, the idea of mechanical distribution was forgotten until the early part of the 19th century when vending machines appeared in London coffeehouses where they were used to distribute tobacco.[4] Shortly thereafter interest in mechanical selling spread to the continent and subsequently venders dispensing beer, wine, liquor, milk and bouillon appeared in railway stations and public gardens in France, Germany and other European countries.

The era of automatic merchandising in the United States is believed to have commenced about the year 1886. Percival Everett, an Englishman, is credited with having developed one of the first springless scales which he brought to the United States. According to trade legend, Thomas Adams, the chewing gum manufacturer, outbid James B. Duke, the tobacco king, for the rights to the machine. Adams converted the machine to vend his brand of chewing gum and installed the vending machines on the platforms of New York City's elevated railway. Their success led to the development of a number of machines which dispensed chocolates, nuts, matches, cigars, stamps, and perfumes. Because of the mechanical weaknesses existing in the early venders and their susceptibility to the use of slugs, automatic merchandising machines were restricted to penny operation during the early part of the 20th century.[5]

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[1]This definition was developed by the writer for the purpose of this study. The Automatic Merchandising Association excludes turnstiles, telephone coin boxes and gas or electric meters as "vending machines."

[2]**Modern Automatic Merchandising,** Chicago, Illinois, Automatic Merchandising Association, 1946.

[3]"Hero, or Heron, of Alexandria," **Nelson New Loose Leaf Encyclopedia,** Vol. VI, 1932, p. 175.

[4]Arthur E. Yohalem, "The Story of Automatic Merchandising," **N.A.M.A. Automatic Merchandiser,** 1947 Exhibit Edition, p. 118.

[5]**Ibid.,** p. 119.

The success of the Automat, which opened in Philadelphia in 1902, was probably one of the most potent factors in stimulating interest in the automatic distribution of food and beverages in the United States. The beverage dispenser was divorced from its Automat location in 1905 when a barrel-sized vender, called "Help Yourself," was developed to dispense ice-water. A number of these machines were placed in Coney Island and New York City. However, it was not until refrigeration was introduced to the automatic merchandising industry in the year 1927 that beverage machines were accepted by the public.[6] Refrigeration provided the impetus for the development of ice machines, ice cream venders, and milk and fruit dispensers.

The cigarette machine first appeared in the United States in 1926. This invention was an important step in the growth of automatic merchandising in this country. By 1939 cigarette dispensers sold more than 10 per cent of the total domestic output in the United States[7] and it is estimated that from 17 to 20 percent of all cigarettes retailed are sold through vending machines today.[8]

One of the most significant stages in the growth of automatic merchandising was reached in 1929 when Mr. Alexander Flaunn was granted patent rights on his frankfurter machine, the first of its kind in the United States. This machine was considered to be of sufficient importance to be listed among the 100 inventions and discoveries selected from the field of applied science which were believed to hold the greatest promise of changing the course of civilization.[9] Since then, changing economic conditions, increasing complexities and variables in consumer demand have resulted in the development of numerous service machines, including parcel checking lockers, personal weighing scales, insurance machines, shoeshine machines, and coin laundries.

For many years one of the most serious problems confronting the automatic merchandising industry was the use of slugs in merchandise and service machines. Losses as high as $5 million annually were sustained by the operators of vending machines. Two factors have reduced these losses substantially. The first was the invention of the slug rejecting devices, utilizing both a mechanical and magnetic means of automatically gauging the size, weight, alloy and hardness of coins. The second was the passage of the Federal Anti Slug Law on April 1, 1944.[10]

Development of the coin changer in the late 1940's[11] was another important milestone in the growth of the automatic merchandising industry. Prior to its development it was estimated that one out of every five sales had been lost because of the lack of proper change in customers' pockets.[12] Since many products sold through automatic merchandising machines are impulse goods, particularly soft drinks, this was a serious loss of sales.

Technological knowledge gained during World War II in the fields of refrigeration, electronics and plastics has led to the improvement of many of the older types of machines and has given rise to numerous new types for the dispensing of hot sandwiches, coffee, ice cream bars and sandwiches, and fresh flowers.

IMPACT OF AUTOMATIC MERCHANDISING ON RETAILING

The major function of automatic merchandising is to implement the flow of goods and services to the ultimate consumer by supplementing manpower with the power of the machine. Automatic

[6]Arthur E. Yohalem, "Cold Facts on Ice Cream Venders," **Vend,** Vol. I, December, 1946, p. 30.

[7]"Machine Distribution Increasing in United States," **Tobacco,** December 21, 1939, p. 8.

[8]Fred Amann, "Vender Profit Margins on Upgrade," **The Billboard,** Vol. LXI, October 8, 1949, p. 102.

[9]Clark Tibbitts, "Inventions and Discoveries," **The American Journal of Sociology,** Vol. XXXV, May, 1930, p. 895.

[10]Curtis E. Anderson, "Automatic Merchandising Sales Goal Three Billion," **Domestic Commerce,** April, 1947, p. 2.

[11]Bertrand R. Canfield, "Will Retail Robots Revolutionize Marketing?" **Advertising and Selling,** Vol. XL, August, 1947, p. 78.

[12]"Can You Sell Your Product Through Vending Machines?" **Printers' Ink,** Vol. CCXXV, October 1, 1948, p. 56.

merchandising is a valuable adjunct in retail establishments since it can efficiently complete small, routine, repetitive sales, thus releasing salespersons from monotonous tasks and making them available to use their skills in selling higher priced merchandise that may require demonstration, persuasion or personal attention.[13]

Another important function of automatic merchandising is the establishment of markets for the distribution of goods and services in areas where it is not profitable nor feasible to station selling personnel, such as on elevated platforms, subways, office buildings, industrial plants, theater lobbies, school buildings, and in isolated sections, such as gasoline stations on roads and highways. The prime incentives of automatic merchandising are availability and impulse.[14] The availability of goods and services has an important effect on consumer choice.[15] It motivates consumer action in the purchase of many convenience items, particularly candy and soft drinks.

The extent to which automatic merchandising has penetrated the retail sector in the distribution of foods, beverages and confections is illustrated in Table 1. Approximately 2,160,000 automatic merchandising machines were used by the consuming public in 1949. Estimated sales through these venders amounted to $1,030,294,000.

Growth of the automatic merchandising industry is demonstrated in the 1947 Census of Manufacturers survey report. By 1947 the national product value of vending machines amounted to $56,900,000. This represented an increase of 235 per cent over the $17 million reported by the industry in 1939.

The scope of automatic merchandising is indicated in Table 1. Although the largest number of machines are utilized to dispense penny items, the greatest amount of sales is accounted for in the cigarette vending sector of the industry. During 1949 cigarette sales through vending machines accounted for approximately $624,624,000. Sales of bottled beverages, sold by the mechanical salesman, amounted to about $191,880,000. The vending of five-cent candy bars is the third largest sector of the automatic merchandising industry. In 1949 approximately $126,310,000 worth of candy bars were sold mechanically. It has been estimated that vending machines account for approximately 15 per cent of the nation's total output of five-cent candy bars.[16]

Automatic merchandising is an efficient and effective method of retail distribution, benefiting the consumer, the retail establishment and the manufacturer of consumer goods. That this is true is apparent from the fact that automatic merchandising machines today are selling hundreds of nationally advertised products. It is evident that automatic merchandising is slowly gaining momentum. In 1927 it was estimated that total sales of merchandise through automatic merchandising machines amounted to approximately $25 million.[17] Estimated sales through vending machines in 1946 totaled $452 million;[18] by 1947 they amounted to $515 million;[19] in 1948 the figure was $879,750,000[20] and in 1949, total sales were estimated to be $1,030,294,000 (see Table 1).

Machine distribution appears to be responsible for changing the classification of some shopping goods, such as hosiery, to the convenience goods classification. Similarly, consumers' buying habits seem to be changing. There is a trend toward the acceptance of machine selling as a

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[13]Peter F. O'Shea, "Can Selling Be Done by Machinery?" **Magazine of Business,** Vol. LIV, November, 1928, pp. 517-19.

[14]**A Detailed Study of the Vending Machine Industry,** Prepared by the Editors of **The Billboard** and **Vend,** 1949, p. 4.

[15]Paul H. Nystrom, **Marketing Handbook,** The Ronald Press Company, New York, 1948, p. 35.

[16]"Census of the Industry, 1950," **Vend,** Vol. LV, January, 1950, p. 26.

[17]Nystrom, **op. cit.,** p. 345.

[18]"Mechanical Clerks to Retail $500,000,000," **Confectioners Journal,** July, 1947, p. 24.

[19]"Can You Sell Your Product Through Vending Machines?" **op. cit.,** pp. 31-32.

[20]**A Detailed Study of the Vending Machine Industry, op. cit.,** p. 6.

TABLE I

Automatic Merchandising Sales* in the United States, 1949

Type of Machine	Number of Machines (Thousands)	Unit of Sale	Total Sales Quantity (Millions)	Total Sales Value (Thousands of Dollars)
Penny Market	1,000.0	Piece	5,200.00	52,000
Bottle	410.0	Bottle	3,837.6	191,880
Cigarette	364.0	Pack	2,839.2	624,624
Nickel Market	347.0	Bar	2,526.2	126,310
Cigar	16.0	Cigar	33.3	3,330
Cup	15.0	Drink	643.0	32,150
Ice Cream	6.0	Dixie Cup, Bar	**	**
Coffee	2.4	Cup	**	**
TOTAL	2,160.4		15,060.3	1,030,294

*Estimated **Data not available

Note: Because penny bulk venders are used interchangeably to vend a wide variety of confections, no further breakdown of the penny market can be made. The figures are expressed in round numbers. Machines included in this category are bulk nut, ball gum, pan candies, penny stick chewing gum and penny candy bar venders. The statistics for the Nickel Market cover sales of candy bars made through vending equipment.

Source: **Vend,** January, 1950, pp. 26-29.

trade channel of retail distribution. Economies in operation to the manufacturer of consumer goods and to retail establishments and conveniences to the buying public, coupled with a growing favorable sentiment with regard to impersonal machine selling, seem to point to an even deeper penetration of automatic merchandising into the nation's retail structure in the future.

DISTRIBUTION COSTS

Distribution, or the marketing of goods, is an important phase of business operation. Its function is to satisfy the needs and desires of the consumer, to place the goods in his hands, and to increase the number and type of commodities that he wishes to purchase.[21] More than one-half of the consumer's dollar is spent for the marketing of goods, while less than half covers the cost of producing those goods. It has been estimated that approximately 59 per cent covers marketing costs while 41 per cent covers production costs.[22]

There are two schools of thought with regard to distribution costs. One contends that distribution is too costly. This group believes that there are many opportunities for saving in the retail distribution process and that the new distributive agencies, through economies of standardized and large scale operation, have proven the inefficiency of many of the older forms of retailing.[23] Mr. Richard D. Crisp expressed this point of view as follows:

> "Marketing costs are a large and frequently increasing portion of the total expense of most firms. . . . Two characteristics of those costs are outstanding. One is their **magnitude.** . . . The second characteristic might be described as the **inherent reducibility** of marketing costs. Those costs can be reduced."[24]

On the other hand, Paul M. Mazur questions whether distribution costs enough. He states that "distribution is the delivery of a standard of living." He further points out that the development of large consumer markets, while costly in a sense, was essential for the consumption of goods manufactured under our mass production techniques.[25] The

[21]Paul D. Converse, **Essentials of Distribution,** Prentice-Hall, Inc., New York, 1937, pp. 1-4.

[22]P. W. Stewart and J. F. Dewhurst, **Does Distribution Cost Too Much?** The Twentieth Century Fund, New York, 1939, p. 117.

[23]**Ibid.,** p. 348.

[24]Richard D. Crisp, **How to Reduce Distribution Costs,** Funk & Wagnalls Company, New York, 1948, p. 2.

[25]Paul M. Mazur, "Does Distribution Cost Enough?" **Fortune,** November, 1947, Vol. XXXVI, p. 138.

chief reasons for increasing costs of retail distribution include [26] (1) the fact that distribution costs have, to some degree, replaced production costs, and (2) the increase in the provision of free services such as delivery, extension of credit, telephone orders, demonstrations, sending goods out on approval, exchanges, lectures, fashion shows, rest rooms, children's play rooms, auditoriums, and even concerts.

The first group mentioned point out that:

> "For decades the inventive genius of American business has been chiefly dedicated to the lowering of production costs through mechanization and scientific management and to the elimination of inefficiencies in making goods. . . . It is equally true that the same inventive genius has hardly begun to be applied to the reduction of distribution costs."[27]

It should now be emphasized that mechanized methods have been applied to practically every phase of the production process, to transportation and handling of goods, to management functions in office and clerical practices, and even to sales through the medium of advertising, but the machine technique has not been applied, as yet, to large scale retailing. The same archaic method of personal effort, used for thousands of years in the distribution of goods, still prevails. While the output of the industrial worker has increased tremendously through the use of the machine, individual personal effort is still being used to complete an infinite number of retailing transactions.[28]

The potential reduction in the cost of distribution through the application of machine technique is probably greater than in production. Although large scale mechanization of retail distribution may cause some displacement of labor, it would probably be only a temporary situation. The resultant lower prices through the application of mechanized selling would increase purchasing power and expand markets for additional goods and services. This, in turn, would result in increased production and employment in the automatic merchandising industry, as well as in many other industries in the long run.[29]

Many significant changes in retail distribution have taken place since the early 1930's. The growth of chains, supermarkets, and automatic merchandising indicates that the techniques and methods employed in these new distributive agencies have proven more practical than the costly methods practiced by the older form of retail distribution.[30] These changes in retail distribution can be traced to technological advances which have altered consumer buying habits. The rise of automotive transportation, the greater mobility of both urban and rural population, the development of labor-saving household appliances, the development of domestic refrigeration, and shorter working hours, all have tended to change the buying habits of the consumer. In addition to these, competition among the distributive agencies has been an important factor. The department store, for example, is a particularly high cost retailing institution. Operating ratios for department stores averaged as high as 35 per cent in both 1935 and 1940 but they declined to about 28 per cent by 1945.[31] The rise of the large scale

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[26] Malcolm P. McNair, Stanley F. Teele, Frances G. Mulhearn, **Distribution Costs: An International Digest,** Harvard University, Boston, 1941, p. 2.

[27] Stewart and Dewhurst, **op. cit.,** p. 3.

[28] McNair **et al., op. cit.,** pp. 3-5.

[29] Stewart and Dewhurst, **op. cit.,** p. 21.

[30] **Ibid.,** pp. 3-6.

[31] Milton P. Brown, **Operating Results of Department and Specialty Stores in 1945.** Harvard University, Graduate School of Business Administration, Bureau of Business Research, Bulletin No. 124, 1946, p. 3.
McNair also points out that these high operating expenses are attributable, in part, to the fact that probably less than half of these stores' employees are engaged in the selling of merchandise. They perform such activities as receiving, marking, buying of goods, preparation of advertising copy, inspection and delivery of merchandise, window dressing, and elevator operation. In the smaller establishments the volume of sales does not warrant specialization of duties and the division of labor. Both the large and small enterprises, however, are "closely governed by the personal productivity factor." Sales made by the employee are probably not significantly different in the large concern from those in the smaller one. McNair **et al., op cit.,** p. 24.

retail institutions, such as department stores; mail order houses, chain stores and supermarkets has not caused any serious displacement of the small business enterprise. The traditional single store, operated by the independent merchant, still plays a dominant role in the retail structure of the United States.

Reduction of Operating Expenses

There is every indication that automatic merchandising will be one of the revolutionary steps in aiding to reduce distribution costs. However, there are no available data to support this statement inasmuch as automatic merchandising is a relatively new field and complete statistics covering costs of operation have not been compiled as yet. In general, it may be stated that stores operating on a cash and self-service basis have lower cost ratios. These costs can probably be further reduced through the application of machine selling. Records of sales can also be mechanically registered through the use of recorders which can be installed within the vending machines. These recorders register, tabulate and compute the number of transactions and weekly totals of sales made through the machines. The counting of individual coins is also eliminated.

Food is the most important commodity in the consumer's budget in the United States. "Together with liquor and tobacco, it constitutes about a third of the nation's consumption expenditures." It was estimated that food consumption would increase from $16.4 billion in 1940 to $20.6 billion in 1950 and to $23.3 billion in 1960 (in 1940 prices).[32] In view of these predictions, it appears that automatic merchandising penetration in the food field will probably be extended. The opportunity for the sale of frozen foods is tremendous. The drawback to the dispensing of these products is the lack of adequate automatic vending equipment for their distribution. However, as soon as such equipment becomes available, automatic merchandising will provide an auxiliary selling arm in the distribution of these products.

The application of machine selling of the foods in department stores, chains and supermarkets will probably reduce operating costs in these large scale retailing institutions. Mechanical distribution will tend to reduce losses sustained through spoilage and deterioration caused by customer handling; it will provide prompt and efficient service; it will eliminate wrappers, checkers, and clerks; and it will reduce the use of cash registers and other sales recording equipment, since this task can be accomplished within the vending equipment itself.

Drug stores, as in the case of grocery stores, handle many convenience items, carrying from 2,500 to 3,000 distinct products, and as many as 8,000 to 10,000 items. With the removal of existing restrictive laws in many states, preventing the automatic merchandising of drugs, there is an opportunity for the application of machine selling in the distribution of these small unit commodities such as aspirin, vitamins, cold tablets, and similar remedies.

The demand for personalized services, which arises from the same desires as for goods,[33] is becoming very important in the field of automatic merchandising. This is revealed by the increased patronage of the parcel checking lockers, personal weighing scales, insurance machines, and coin laundries.

There is a considerable variation in retail margins among the various retail establishments, ranging from 15 to 30 per cent, on the average, of the prices paid by the consumer.[34] While there is no conclusive evidence that the larger retail institutions are more economical than the smaller units, or that the latter can operate more cheaply, it seems that these differences result from the variations in the efficiency with which the numerous retail functions are performed. Expenses

[32] A. Benjamin Handler, "Food, Liquor and Tobacco," **America's Needs and Resources,** The Twentieth Century Fund, New York, 1947, pp. 88 and 118.

[33] Converse, **op. cit.,** p. 241.

[34] Fred E. and Carrie Patton Clark, **Principles of Marketing,** Macmillan Company, New York, 1947, p. 746.

vary with the time and effort required to make sales, with the space occupied by the merchandise in the store and the warehouse, with services rendered to the customer, and the rate of stock turnover.[35]

Automatic merchandising may be a potent factor in the mass distribution of many convenience commodities. The cumulative effects of the changes in consumer buying habits are slowly being revealed through the steady progress of automatic merchandising penetration in the field of retail distribution. Also, automatic merchandising may be instrumental in standardizing the method of selling small unit items.

FORESEEABLE TRENDS IN AUTOMATIC MERCHANDISING

Probably the greatest application of this newest form of distributive agency will eventually be seen in the selling of foodstuffs. Plans have been made to utilize lobby space in apartment houses for the automatic merchandising of such items as candy, cigarettes, cereals, milk, and frozen foods.[36] The placing of Food-O-Mats[37] in supermarkets is a step in the direction of mass distribution of foods through vending machines.

City projects are being planned for new multiple enterprise recreation centers. Demands for items such as firewood, charcoal, sandwiches, fruits, beverages, and salads would mean the construction of vending machines to meet these needs. Other supplies such as napkins, cups, plates, tablecloths, spoons, forks, towels, soap, sunburn lotion and other articles may be in demand.

Plans for city beautification include establishment of community garden projects. In the event of the fruition of these plans, a host of garden supplies would be in great demand from outdoor venders. Seeds, fertilizers, string, sunglasses, insecticides are only a few of the requirements which the machines would be expected to supply.[38]

Still other plans are being made for the automatic merchandising machine to operate on a full 24 hour schedule. These plans, still in the drawing board stage, call for batteries of automatic merchandising machines placed along the fronts of drug stores to be used for supplementing manual sales of standard products during the day and the sections converted into outdoor stores for emergency night purchases after the store has closed.[39] This principle probably could be applied to other types of retail establishments, such as food stores, hardware stores, and five and ten cent stores.

Future application of machine power to retail distribution of consumer goods and services undoubtedly will be expanded. New courses will be charted in the distribution of many commodities through mechanical selling. New products, revisions in policies, and more attention to the adaptation of products from the viewpoint of the consumer will probably result from the evolution of automatic merchandising. Casualties may result among old products and old forms of distribution, but there will probably be a greater replacement of new products and greater benefits to the consuming public through the application of scientific ability.

Research, ingenuity and mechanical skill will probably result in the development of many new types of vending machines and the adaptation of additional commodities and services to machine distribution, thus further widening the scope of the automatic merchandising industry in the United States.

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[35]Converse, **op. cit.,** p. 347.

[36]"Automatic Merchandising," **Illinois Business Review,** University of Illinois, August, 1949, Vol. VI, p. 3.

[37]This equipment permits the display of a number of brands and sizes of products. When the shopper selects a can, bottle, or package, another automatically takes its place. Although automatic, it is not coin-operated. "Forerunner of Automatic Store for Philadelphians, **Vend,** April, 1948, Vol. II, p. 48.

[38]Anderson, **op. cit.,** p. 3.

[39]R. Z. Green, "Automatic Merchandising —Today and Tomorrow," **N.A.M.A. Automatic Merchandiser,** 1947 Exhibit Edition, pp. 148-149.